

Faculty members interested in accepting NSERC USRA and/or WSRI USRI students.

Note: Students can approach other Biology Faculty Members not listed below.

A complete list of Biology faculty members is located at:

<http://www.uwo.ca/biology/people/faculty.htm>

Dr. Robert Buchkowski, BGS 2074, Ext. 88969, rbuchkow@uwo.ca

Website: <https://nmuwo.wordpress.com/>

Project proposal: We work on terrestrial ecology and climate change. Ongoing projects include studying animal effects on carbon cycling, soil carbon storage, and soil biodiversity. USRA/USRI projects focused on field work (in Ontario or New Brunswick), laboratory experiments with soil and soil fauna, or computational modelling are all possible. Please reach out if you're interested or have a project in mind we might be able to support.

Dr. T. DeFalco, NCB 465, Ext. 81475, tdefalc@uwo.ca

Website: <https://scholar.google.ch/citations?hl=en&user=KlOgpxsAAAAJ>

Project proposal: Receptor kinase signalling in plant stress

We use a variety of molecular, biochemical, and genetic approaches to decipher how plants respond to environmental perturbations at the cellular level. The project will involve identifying and characterizing protein kinases and their substrates that function in receptor kinase (RK) signalling pathways.

Dr. G. Kelly, WSC 359, Ext. 83121, gkelly@uwo.ca

Website: <http://www.uwo.ca/biology/directory/faculty/kelly.html>

Also, check out website: [//thekellylab.weebly.com](http://thekellylab.weebly.com) (Access via Wifi)

Project proposal: Wnt and Hedgehog signaling pathways in embryonic and cancer cells.

Dr. S. Kohalmi, WSC 319, Ext. 86485, skohalmi@uwo.ca

Website: <http://www.uwo.ca/biology/Faculty/kohalmi/index.htm>

Project proposal: Sequence to Function: the ADT Gene Family

Then come and check out the world of Arabidopsis. Our lab is interested to understand how members of a gene family are regulated, respond to environmental stresses, differ or overlap in their function, are targeted to subcellular compartments and contribute to a functional plant. Intrigued? Ask for more information and stop by for a chat.

Dr. K. Hill, WSC 333, Ext. 81337, khill22@uwo.ca

Website: <http://www.uwo.ca/biology/Faculty/hill/index.htm>

Project proposal: NSERC-USRA/USRI researchers in the Hill lab this summer 2025 will be engaged and wet and dry bench work aimed at discovery/detection of acquire mutations in mice. We will be using techniques of whole genome sequencing and other brand new DNA sequencing methodologies of CarcSeq targeted error corrected sequencing and CODEC untargeted ultradeep genome sequencing. The dry bench work is in silico bioinformatics variant discovery and characterization. The variants are point mutations and large structural deletion, duplication and insertion mutations. This work is in the context of normal mouse development and in the context of primary tumors and secondary metastases. We also have data visualization tools, statistical tools and machine learning algorithms that we will be applying in our work.

Dr. Z. Lindo, B&GS 2034, Ext. 82284, zlindo@uwo.ca

Website: <http://www.uwo.ca/biology/Faculty/lindoP/index.htm>

Project proposal: Understanding seasonal dynamics within soil biological communities it is of great interest in ecology and can help us better predict how communities will react to climate change and establish strategies to promote the conservation of biodiversity. The student will perform field work including soil sampling, soil analysis and microarthropod identification in a local environmentally significant area located in London, Ontario.

Dr. N. MacBean, SSC 2412, Ext. 85008, nmacbean@uwo.ca

Website: <https://www.uwo.ca/biology/people/faculty.html#NMacBean>

Project Proposal: Understanding and modeling dryland ecosystem processes. Depending on experience and interests, the project will involve computational analysis of data and model outputs to better understand dryland carbon cycling and sensitivity to climate variables.

Dr. N. Mhatre, B&GS 3023, Ext. 84505, nmhatre@uwo.ca

Website: www.natashamhatre.net

Project proposal: Studying vibrational communication in spiders, or acoustic communication in crickets.

Dr. B. Neff, Collip 204, Ext. 82532, bneff@uwo.ca

Website: <http://www.uwo.ca/biology/Faculty/neff/index.htm>

Project proposal: Behavioural and Conservation of Fishes.

Dr. M. Pyne, B&GS 2030, Ext. TBA, mpyne3@uwo.ca

Website: <https://scholar.google.ch/citations?user=i4LlrHYAAAAJ&hl=en>

Potential project: Engineering yeast for production of dauricine, a potential plant chemotherapeutic

Dr. A. Percival-Smith, WSC 305, Ext. 84015, aperciva@uwo.ca

Website: <http://www.uwo.ca/biology/Faculty/percivalsmith/index.htm>

Project proposal: Phenotypic non-specificity of Transcription Factor Function in Yeast.

Dr. V. Tai, B&GS 2028, Ext. 86209, vtai4@uwo.ca

Website: <https://www.uwo.ca/biology/directory/faculty/tai.html>

Project Proposal: Using molecular and genetic tools to investigate phytoplankton and aquatic microbiomes. Investigating mechanisms of corrosion by bacteria.

Dr. R. Thomas, rthoma2@uwo.ca

Website: <https://raymondthomaslipidlab.com/>

Research Interests:

- o Nootropic and Functional Foods Innovation,
- o Lipid Bioinformatics/Novel Lipidomics Workflow/Method Development
- o Foodomics/Food metabolomics/Food Metabolism/Food as Medicine/Food Informatics/Food Arts
- o Brain Health/Neurolipidomics/Short chain fatty acids induced brain stress
- o Lipid Metabolism in Environmental Stress Biology, Boreal Agriculture/Ecosystem/Climate
- o Green Food grade extraction systems
- o Lipid metabolism in Boreal Forest reclamation/restoration
- o Food circularity, adaptive, sustainable food systems
- o Bioresource full utilization/Circular economy
- o Nanotechnology in boreal forest reclamation/sustainable food systems

Dr. G. Thorn, B&GS 3047, Ext. 88647, rgthorn@uwo.ca

Website: <https://publish.uwo.ca/~rgthorn/>

Project proposal: Projects on the systematics of mushroom fungi, using phylogenetic analyses of rDNA (and possibly other) sequences.

Dr. Timoshenko, BGS 3032, Ext. 88900, atimoshe@uwo.ca

Website: <https://www.uwo.ca/biology/faculty/timoshenko/>

Project proposal: Cell and molecular biology of tissue-specific galectins.

Dr. L. Zanette, CB 207, Ext. 88316, lzanette@uwo.ca

Website: <http://www.uwo.ca/biology/Faculty/zanette/index.htm>

Project proposal: How the fear of predators affects wildlife prey: from birds to African elephants.

Opportunities at Agriculture and Agri-Food Canada:

Dr. Sangeeta Dhaubhadel, Agriculture and Agri-Food Canada, 519-953-6616

sangeeta.dhaubhadel@canada.ca

Project proposal: Genomics of legume specialized metabolism.

Dr. Abdelali Hannoufa, Agriculture and Agri-Food Canada, 519-953-6621

abdelali.hannoufa@canada.ca

Project proposal: The student will work on abiotic stress tolerance in plants, and will receive training in molecular biology, biotechnology, and plant physiology.
